

vided. While one may argue with some features of the therapy suggested, seldom do two physicians agree entirely as to the specifics.

In the opinion of this reviewer, this book should be available on every pediatric service and in every office of those concerned with the care of children. It does not, as the authors candidly indicate, replace the more detailed and extensive standard treatises on the diseases of children, but its usefulness lies in the ready access to the essentials of the problems at hand. The authors are to be commended for this volume, and we may hope for timely editions in the future.

PAUL F. WEHRLE, M.D.

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MUSCLES—Testing and Function—Second Edition—Henry Otis Kendall, P.T., Formerly Director, Physical Therapy Department, Children's Hospital School, Baltimore; Florence Peterson Kendall, B.S., P.T., Faculty member, Department of Physical Therapy, University of Maryland School of Medicine; and Gladys Elizabeth Wadsworth, Ph.D., P.T., Associate Professor, Department of Anatomy, University of Maryland School of Medicine. The Williams and Wilkins Company, 428 East Preston Street, Baltimore, Md. (21202), 1971. 284 pages, fully illustrated, \$19.75.

The authors, having had a vast experience in muscle testing and grading, especially with poliomyelitis patients (fortunately quite uncommon now), have continued their studies and present an atlas of definite value in an understanding and interpretation of muscle function, normal or abnormal, and testing therefor.

Those with a special interest in musculoskeletal function and testing for such, as orthopedists, neurosurgeons, physiatrists, physical therapists, trainers and residents, will find a good presentation in this work, and it is recommended not only for reading but to have as a reference.

Excellent diagrams in color of muscles, with origin and insertion, also nerve supply, are shown and offer a fine opportunity for quick anatomical review.

Function of normal muscles, singly and in groups, and tests for these as well as abnormal muscle function either from partial paralysis or contracture, is very well described also illustrated in pertinent photographs.

Grading of muscle strength is well discussed, including factors of gravity, also pressure, weakness, shortness, contracture, substitution and fixation, and which factors are generally not always well understood or considered in grading. Also the term "normal" is discussed, pointing out that it does differ for certain muscle function in different age groups. Movement of joints is described, some of which is known in general, but not in detail as presented.

Charts are shown depicting sensory nerve supply which can be helpful in determining neurological deficits.

Thus in review, this book is definitely recommended for those in medicine and allied activities, who have a special interest in muscular and musculo-skeletal problems, including testing for normal as well as for abnormal function.

PAUL E. MCMASTER, M.D.

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CARDIOVASCULAR BETA ADRENERGIC RESPONSES—UCLA FORUM IN MEDICAL SCIENCES—Number Thirteen—Proceedings of a Conference held February, 1968, Sponsored by the UCLA School of Medicine and the University of California Extension, Los Angeles; Partially supported by a grant from Ayerst Laboratories—Edited by Albert A. Kattus, Gordon Ross and Victor E. Hall. University of California Press, 2223 Fulton Street, Berkeley, Ca. (94720), 1970. 284 pages, \$20.00.

Among the most important recent advances in improved understanding of performance of the sympathetic nervous

system has been development of the concept of two different functional types of adrenergic effector sites in organs throughout the body. In the cardiovascular system, beta adrenergic receptors are located in the myocardium, while both alpha and beta receptors are present in the peripheral vascular beds. Enormous progress has been achieved in the characterization and function of these receptors which has proven to be considerably useful to the clinician, as well as to physiologists and pharmacologists. This new information is carefully synthesized in the present monograph containing the proceedings of the authoritative UCLA Forum in Medical Sciences held in February of 1968. The highlights of the symposium include presentations from 20 nationally known participants on the basic mechanisms and clinical significance of beta adrenergic stimulation and inhibition in the cardiovascular system. Emphasis is focused on the benefits and hazards which attend beta blockade with propranolol in the treatment of cardiac tachyarrhythmias, angina pectoris due to coronary artery disease, obstruction to left ventricular outflow in idiopathic hypertrophic subaortic stenosis, and hypertensive diseases. While the biochemical and structural nature of the beta receptor and related sub-receptors remains to be clarified, this book provides a concise review of the present knowledge of the pharmacology which is essential for physicians in the salutary use of beta adrenergic agonists and antagonists.

DEAN T. MASON, M.D.

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TRANSPLANTATION TODAY—Proceedings of the Third International Congress of the Transplantation Society, September 7-11, 1970, The Hague, The Netherlands—Editors: Hans Balner, Rijswijk, The Netherlands; D. W. van Bekkum, Rijswijk, The Netherlands; Felix T. Rapaport, New York City. Grune & Stratton, Inc., 757 Third Avenue, New York City (10017), 1971. 978 pages, \$25.00.

This book contains the Proceedings of the Third International Congress of the Transplantation Society held in The Hague, September 7-11, 1970. It is guest edited by Drs. Hans Balner and D. W. van Bekkum. It is really a compilation of all of the recent advances in transplantation in all of its aspects—from the most fundamental to the most recent clinical advances. In its 978 pages there is much information for the student of transplantation biology, the basic immunologist as well as clinical transplanters.

The first section of the text is devoted to general surveys of important issues in transplantation, for example the genetics of transplantation is reviewed; immunocompetent cells in graft rejection; antigen induced immunosuppression as well as immunosuppression by chemical agents; antilymphocyte serum and its mode of action; the phenomenon of immunological tolerance and enhancement as well as heterotransplantation and bone marrow transplantation. This aspect of the text should be of interest to a wide sector of the medical profession.

The text also deals with *in vitro* testing and its relationship to HL-A antigens—data is available on the mixed leukocyte culture and the role of cytotoxic antibodies in organ graft rejection. The importance of enhancing antibodies in tumor transplantation as well as organ transplant rejection is a new and interesting finding reported in this text.

For the individuals interested in clinical transplantation there is a section devoted to clinical relevance such as the relevance of HL-A phenotyping in organ transplantation and the ways in which histocompatibility grading can be carried out. The relevance of these aspects of transplantation to other species—the DLA system in dogs—and the relevance of histocompatibility antigens in other species is also included. The chemistry of trans-